

IN THE CLAIMS:

Amend Claim 1 as follows and add Claim 21:

1. (Currently amended) Hydraulic system, comprising

at ~~test~~ least one hydraulic drive means (1),

a conduit system (10) connected to the hydraulic drive means (1) for conveying hydraulic liquid to and from the hydraulic drive means (1), ~~where~~

the conduit system ~~comprises~~ comprising a conduit circuit (11) containing hydraulic liquid, connected to the hydraulic drive means (1), a pump (12) structured and arranged for generating a flow of hydraulic fluid in the conduit system (10) and a motor (13) structured and arranged to power the pump (12), wherein

the pump (12) is structured and arranged to control the flow of hydraulic liquid in said circuit (11), ~~and~~

the hydraulic drive means (1) is structured and arranged to be controllable substantially only by controlling the flow of hydraulic liquid in said circuit (11) by ~~means of~~ the pump (12), and

there are no valves such as throttle or directional valves present in the circuit (11), except for a single valve (15) positioned between the pump (12) and hydraulic drive means (1) and structured and arranged to fix the hydraulic drive means (1) in position when closed (a passive valve).

2. (Previously Presented) Hydraulic system according to claim 1, wherein the pump (12) is arranged to control direction of the flow of hydraulic liquid in said circuit (11) and thereby control the direction of action of the hydraulic drive means (1).

3. (Previously Presented) Hydraulic system according to claim 1, wherein the pump (12) is arranged to control the flow rate of the hydraulic liquid in said circuit (11) and thereby control the effective rate of the hydraulic drive means (1).

4. (Previously Presented) Hydraulic system according to claim 1, wherein the motor (13), that powers the pump (12), is arranged to control the pump to control the flow of hydraulic liquid in said circuit (11).

5. (Previously Presented) Hydraulic system according to claim 1, wherein said motor (13) is an electrically driven motor.

6. (Previously Presented) Hydraulic system according to claim 1, wherein it comprises means for regenerating mechanical energy transmitted to the hydraulic drive means (1), due to loading of the hydraulic drive means.

7. (Previously Presented) Hydraulic system according to claim 6, wherein said energy regeneration means include the motor (13), that is arranged to be driven as a generator by the pump (12), for regeneration of energy when said mechanical energy transmitted to the hydraulic drive means (1) is transformed to liquid energy of the hydraulic liquid in said circuit (11) and thereby powers the pump (12).

8. (Previously Presented) Hydraulic system according to claim 6, wherein it comprises means to store regenerated energy.

9. (Previously Presented) Hydraulic system according to claim 8, wherein said energy storage means comprises at least one rechargeable battery.

10. (Previously Presented) Hydraulic system according to claim 6, wherein the motor (13) is powered by the energy regenerated by said energy regenerated means.

11. (Previously Presented) Hydraulic system according to claim 10, wherein the motor (13) is powered by regenerated energy stored in said energy storage means.

12. (Previously Presented) Hydraulic system according to claim 1, wherein the hydraulic drive means (1) is a hydraulic cylinder.

13. (Previously Presented) Hydraulic system according to claim 12, wherein the hydraulic cylinder has chambers (4, 5) containing hydraulic liquid, arranged on opposite sides of a piston (2), with a piston rod (3) connected to the piston received in one chamber (5), and the system comprises an arrangement (16-22) arranged to provide a supply of hydraulic liquid to said conduit circuit (11) on controlling the hydraulic cylinder (1) to move the piston in a direction for reducing the volume of said one chamber (5) and to tap hydraulic liquid from the conduit circuit (11) on movement of the piston in the opposite direction.

14. (Previously Presented) Hydraulic system according to claim 13, wherein the arrangement comprises at least two conduits connected to a tank (19) for hydraulic liquid and to the conduit circuit (11) via a valve (17, 18) each.

15. (Previously Presented) Hydraulic system according to claim 14, wherein a first of the conduits connected to the hydraulic liquid tank has a one-way valve (18) that only makes the flow of hydraulic liquid from the tank (19) to the conduit circuit (11) possible to supply hydraulic liquid to the conduit circuit on movement of the piston in the direction for reducing the volume in said one chamber (5) when the valve (17) is closed in the second conduit (21) to the tank, whereby the second conduit is connected to the conduit circuit (11) nearer to said one chamber (5) than to the first conduit (22).

16. (Previously Presented) Hydraulic system according to claim 15, wherein the valve (17) in the second conduit (21) is controllable to be open when the piston is displaced in the direction for reducing the volume in said one chamber (5).

17. (Previously Presented) Hydraulic system according to claim 15, wherein the arrangement comprises a third conduit (20) connected, via a valve (16), to the hydraulic liquid tank (19) which is connected to the conduit circuit (11) on the opposite side of the first conduit's (22) connection thereto relative to the second conduit (21), and ~~that~~ the valve (17) in the second conduit (21) is controllable to be closed and the valve (16) in the third conduit (20) is controllable to be open simultaneously when the piston is displaced in the direction for reducing the volume in said one chamber (5).

18. (Previously Presented) Hydraulic system according to claim 2, wherein the pump (12) is arranged to control the flow rate of the hydraulic liquid in said circuit (11) and thereby control the effective rate of the hydraulic drive means (1).

19. (Previously Presented) Hydraulic system according to claim 7, wherein it comprises means to store regenerated energy.

20. (Previously Presented) Hydraulic system according to claim 16, wherein the arrangement comprises a third conduit (20) connected, via a valve (16), to the hydraulic liquid tank (19) which is connected to the conduit circuit (11) on the opposite side of the first conduit's (22) connection thereto relative to the second conduit (21), and the valve (17) in the second conduit (21) is controllable to be closed and the valve (16) in the third conduit (20) is controllable to be open simultaneously when the piston is displaced in the direction for reducing the volume in said one chamber (5).

21.(new) Hydraulic system according to claim 1, wherein

said hydraulic drive means (1) comprises a cylinder (1) and a piston (2) connected to a piston rod (3) and movably positioned within said cylinder (1) to divide said cylinder (1) into two separated chambers (4,5), and

with said single valve (15) positioned in said circuit (11) between said pump (12) and one (4) of said two separated chambers (4,5) within said cylinder (1).